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To: Intermountain Power Service Corp.

From: RICK ELLIOTT
Siemens Energy & Automation

DELTA, UT 84624

Attention: JON CHRISTENSEN, P.E.

E-Mail:
Tel. No.: 801-563-7101
Fax No.:

Project Name: IPP
Quote Name: IPP Cooling Tower MCC
Quote Number: 1149-1698K-10
Bid Date: 8/26/2002

Siemens Energy & Automation, Inc. (Company) agrees to sell to Purchaser and Purchaser agrees to purchase from the Company the goods described below.

Introduction: Introduction

<u>Item</u>	<u>Qty</u>	<u>Description</u>
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|-----------|----------|--|
| A. | 1 | Switchboard A -- Switchboard SWBD SB3 FCS2 CB
SB3/FCS2 Front Connected, TOP LEFT, SUSE, 3p/4w, 480/277V, Tapered Cu Bus, 3200A, CU, 65K AIC, Brac 65K AIC, NEMA2/1A Enc.
1 - 3200/3 M.O. D.O. SBS - 3200, 3200A Sensors, 3200A Plug, Main Breaker
1 - Trip Unit - LSIGT
1 - Siemens Digital Meter 9300DC - 100 - ZZZZA
1 - Shunt Trip w/ Control Voltage 120
1 - Pilotlight - Oiltight
1 - Key Interlock
2 - 2000/3 M.O. D.O. SBS - 2000, 2000A Sensors, 2000A Plug, Branch Breaker
1 - (7) #3/0-500 kcmil
1 - Trip Unit - LSIT
1 - Auxiliary Contact - 1A-1B
1 - Key Interlock
1 - Incoming 3200A Busway
2 - Lifting Eyes
1 - Tapered 1000A/in2 Cu Bus 100% Rated
2 - Base Unit Cost
1 - Tapered Cu Bus
1 - Front and Rear Alignment
2 - Indoor Drip Proof w/Gaskets
1 - -- Transition Section |
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| B. | 1 | Switchboard B -- Switchboard SWBD SB3 FCS2 CB |
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SB3/FCS2 Front Connected, TOP LEFT, SUSE, 3p/4w, 480/277V, Tapered Cu Bus, 3200A, CU, 65K AIC, Brac 65K AIC, NEMA2/1A Enc.

- 1 - 3200/3 M.O. D.O. SBS - 3200, 3200A Sensors, 3200A Plug, Main Breaker
 - 1 - Trip Unit - LSI GT
 - 1 - Siemens Digital Meter 9300DC - 100 - ZZZZA
 - 1 - Pilotlight - Oiltight
 - 1 - Shunt Trip w/ Control Voltage 120
 - 1 - Auxiliary Contact - 1A-1B
 - 1 - Mechanical Interlock
 - 1 - Key Interlock
- 1 - 2000/3 M.O. D.O. SBS - 2000, 2000A Sensors, 2000A Plug, Branch Breaker
 - 1 - (7) #3/0-500 kcmil
 - 1 - Trip Unit - LSIT
 - 1 - Key Interlock
- 1 - Incoming 3200A Busway
- 2 - Lifting Eyes
 - 1 - Tapered 1000A/in² Cu Bus 100% Rated
- 2 - Base Unit Cost
 - 1 - Tapered Cu Bus
 - 1 - Front and Rear Alignment
- 2 - Indoor Drip Proof w/Gaskets
- 1 - -- Transition Section

C. 1

MCCA -- MCC TIASTAR

TIASTAR, 20" Deep, Front Only, Circuit Breaker, 480V, 3 Phase, 3 Wires, 60 Hz, 65K AIC, NEMA2/12 Enclosure, Horizontal Bus: 2000A Silver plated Copper, Vertical Bus: 600A Copper, Wiring Class I Type B

- 1 - 20" Deep, Front Only, 30" Wide Enclosure
- 1 - 20" Deep, Front Only, 40" Wide Enclosure
- 3 - 20" Deep, Front Only, 20" Wide Enclosure
- 1 - HHED6 Feeder TM CB, Dual, 3 Pole, 125A Frame @ 65KAIC, 60A Trip
- 1 - HHED6 Feeder TM CB, Dual, 3 Pole, 125A Frame @ 65KAIC, 125A Trip
- 1 - Grounding resistor panel, 40" wide, 72" high
- 1 - Main Lugs Only, 2000 Amps, Mechanical Terminals
 - 1 - Main Lugs Only, 2000 Amps, Silver Plated Copper (Tin Plated Stabs), Top Mounted, 65K Bracing
- 1 - HFD6 Feeder TM CB, Standard, 3 Pole, 250A Frame @ 65KAIC, 250A Trip
- 5 - FVNR, CB, Size 5, 200 HP, Class I, Type B
 - 1 - Simocode Overload
 - 1 - Control Circuit Transformer, 480V, 150VA
 - 1 - Control Circuit Interlock on Handle 1 NO, 1 NC
 - 4 - Extra Control Terminal Points (May Require Extra Space, Contact Factory)
 - 2 - Aux. Contact, N.O., Sz 5, Class I, Type B
 - 1 - Aux. Contact, N.C., Sz 5, Class I, Type B
 - 1 - Vacuum Contactor, Size 5
 - 1 - Pilot light (R), Label: Running
 - 1 - Simocode Overload in place of default overload
 - 1 - 14 AWG Control Wire (SIS Insul.)
 - 1 - 10 amp breaker for ground resistor panel

D. 1

MCCB -- MCC TIASTAR

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TIASTAR, 20" Deep, Front Only, Circuit Breaker, 480V, 3 Phase, 3 Wires, 60 Hz, 65K AIC, NEMA2/12 Enclosure, Horizontal Bus: 2000A Silver plated Copper, Vertical Bus: 600A Copper, Wiring Class I Type B

- 3 - 20" Deep, Front Only, 20" Wide Enclosure
- 1 - 20" Deep, Front Only, 40" Wide Enclosure
- 1 - 20" Deep, Front Only, 30" Wide Enclosure
- 1 - HHED6 Feeder TM CB, Dual, 3 Pole, 125A Frame @ 65KAIC, 60A Trip
- 1 - HHED6 Feeder TM CB, Dual, 3 Pole, 125A Frame @ 65KAIC, 70A Trip
- 1 - Neutral Grounding Resistor Panel Section, 40" wide, 72" high
- 1 - HFD6 Feeder TM CB, Standard, 3 Pole, 250A Frame @ 65KAIC, 250A Trip
- 1 - Main Lugs Only, 2000 Amps, Mechanical Terminals
 - 1 - Main Lugs Only, 2000 Amps, Silver Plated Copper (Tin Plated Stabs), Top Mounted, 65K Bracing
- 5 - FVNR, CB, Size 5, 200 HP, Class I, Type B
 - 1 - Simocode Overload
 - 1 - Control Circuit Transformer, 480V, 150VA
 - 1 - Control Circuit Interlock on Handle 1 NO, 1 NC
 - 2 - Extra Control Terminal Points (May Require Extra Space, Contact Factory)
 - 1 - 14 AWG Control Wire (SIS Insul.)
 - 1 - Adhesive Type Labels on Control Circuit Wires
 - 2 - Aux. Contact, N.O., Sz 5, Class I, Type B
 - 1 - Aux. Contact, N.C., Sz 5, Class I, Type B
 - 1 - Vacuum Contactor, Size 5
 - 1 - Simocode Overload in place of default overload
 - 1 - Pilot light (R), Label: Running
 - 1 - 10 amp breaker for ground resistor panel

E. 1

MCCA Option -- MCC TIASTAR

TIASTAR, 20" Deep, Front Only, Circuit Breaker, 480V, 3 Phase, 3 Wires, 60 Hz, 65K AIC, NEMA2/12 Enclosure, Horizontal Bus: 2000A Tin plated Copper, Vertical Bus: 600A Copper, Wiring Class I Type B

- 2 - 20" Deep, Front Only, 30" Wide Enclosure
- 1 - 20" Deep, Front Only, 40" Wide Enclosure
- 3 - 20" Deep, Front Only, 20" Wide Enclosure
- 1 - SBS4000 Main TM CB, Standard, 3 Pole, 4000A Frame @ 100KAIC, 2000A Trip
 - 1 - Kirk Key for the Main Disconnect
 - 1 - Shunt trip
 - 1 - Circuit Breaker Alarm, Class I, Type B
- 1 - HHED6 Feeder TM CB, Dual, 3 Pole, 125A Frame @ 65KAIC, 60A Trip
- 1 - HHED6 Feeder TM CB, Dual, 3 Pole, 125A Frame @ 65KAIC, 100A Trip
- 1 - HFD6 Feeder TM CB, Standard, 3 Pole, 250A Frame @ 65KAIC, 250A Trip
- 1 - Mounting Panel, 40" wide, 72" high
- 1 - Blank Section, 30" wide, 72" high
- 5 - FVNR, CB, Size 5, 200 HP, Class I, Type B
 - 1 - Overload Heaters Included
 - 1 - Bimetal Amb. Comp. Overload XClass 20
 - 1 - Control Circuit Transformer, 480V, 50VA
 - 1 - Vacuum Contactor, Size 5
 - 2 - Aux. Contact, N.O., Sz 5, Class I, Type B
 - 1 - Aux. Contact, N.C., Sz 5, Class I, Type B
 - 1 - 1600 amp
 - 1 - resistor breaker
 - 1 - Factory Option

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- F. 1 MCCB Option -- MCC TIASTAR**
TIASTAR, 20" Deep, Front Only, Circuit Breaker, 480V, 3 Phase, 3 Wires, 60 Hz, 65K AIC, NEMA2/12 Enclosure, Horizontal Bus: 2000A Tin plated Copper, Vertical Bus: 600A Copper, Wiring Class I Type B
3 - 20" Deep, Front Only, 20" Wide Enclosure
1 - 20" Deep, Front Only, 40" Wide Enclosure
1 - 20" Deep, Front Only, 30" Wide Enclosure
1 - SBS4000 Main TM CB, Standard, 3 Pole, 4000A Frame @ 100KAIC, 2000A Trip
1 - Kirk Key for the Main Disconnect
1 - Shunt trip
1 - Circuit Breaker Alarm, Class I, Type B
1 - HHED6 Feeder TM CB, Dual, 3 Pole, 125A Frame @ 65KAIC, 60A Trip
1 - HHED6 Feeder TM CB, Dual, 3 Pole, 125A Frame @ 65KAIC, 100A Trip
1 - HFD6 Feeder TM CB, Standard, 3 Pole, 250A Frame @ 65KAIC, 250A Trip
1 - Mounting Panel, 40" wide, 72" high
5 - FVNR, CB, Size 5, 200 HP, Class I, Type B
1 - Overload Heaters Included
1 - Bimetal Amb. Comp. Overload XClass 20
1 - Control Circuit Transformer, 480V, 50VA
1 - Vacuum Contactor, Size 5
2 - Aux. Contact, N.O., Sz 5, Class I, Type B
1 - Aux. Contact, N.C., Sz 5, Class I, Type B
1 -
1 - resistor disconnect
1 - Factory Option
- G. 2 Bus MCC Transformer Bus -- Busway Sentron**
12 ft., 3000A, Sentron Copper Feeder, 480Y/277 3ø4W, Integral Grd, 200KAIC, Amb 40C, Std Neut
2 - 90 Elbow - SX430C19EL
1 - Flange wall/floor/ceil - SX430C19GWFL
1 - Xfmr Throat - SX430C19VTTX
3 - Hanger - Trapeze - SXTH3
- H. 2 Switchboard Bus Switchboard Bus(2) -- Busway Sentron**
9 ft., 3000A, Sentron Copper Feeder, 480Y/277 3ø4W, Integral Grd, 200KAIC, Amb 40C, Std Neut
2 - 90 Elbow - SX430C10EL
1 - Switchboard Stub Siemens - SX430C10FEND
3 - Hanger - Trapeze - SXTH3
1 - Flange wall/floor/ceil - SX430C10GWFL
- I. 1 MCC Tie Bus -- Busway Sentron**
10 ft., 2000A, Sentron Copper Feeder, 480Y/277 3ø4W, Integral Grd, 150KAIC, Amb 40C, Std Neut
2 - Hanger - Trapeze - SXTH2
2 - Switchboard Stub Siemens - SX320C10FEND

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Comments: Comment Block

Price Policy: Prices are firm for quoted delivery.

Payment: NET 30 DAYS

Shipping: Shipment of goods will be made after receipt of all the following at Company's production facility:
(a) Purchase Order,(b) Technical Information, and if required (c) Drawing Approval.Shipping days for each product type are determined by the Company's published shipping schedules.

Delivery: FOB SHIP POINT FREIGHT ALLOWED

Other: This proposal is based on the Company's interpretation of the plans and specifications and is subject to correction for errors in such plans or specifications. This document and any other documents specifically referred to as being a part hereof constitute the entire agreement on the subject matter, and it shall not be modified except in writing signed by both parties. THIS PROPOSAL IS BASED UPON SIEMENS STANDARD TERMS AND CONDITIONS OF SALE ATTACHED HERETO AND INCLUDED HEREIN. Company hereby objects to any additional or different terms set forth in Purchaser's request for proposal, specifications, purchase order, or any other document of Purchaser. Acceptance of additional or different terms must be specifically assented to in writing by Company.

Freight: Freight allowed on over \$1000 invoice amount.

Reply Address: Documents and related correspondence shall be sent to the Company's office or an authorized Company Distributor at :
Reply to Person Address Line 1 Address Line 2 City, State Zip

Siemens Energy & Automation, Inc. ("Seller")
Standard Terms and Conditions of Sale (9/1/2001)

1. WARRANTY – (a) Seller warrants that on the date of shipment the goods are of the kind and quality described herein and are free of non-conformities in workmanship and material. This warranty does not apply to goods delivered by Seller but manufactured by others.

(b) Buyer's exclusive remedy for a nonconformity in any item of the goods shall be the repair or the replacement (at Seller's option) of the item and any affected part of the goods. Seller's obligation to repair or replace shall be in effect for a period of one (1) year from initial operation of the goods but not more than eighteen (18) months from Seller's shipment of the goods, provided Buyer has sent written notice within that period of time to Seller that the goods do not conform to the above warranty. Repaired and replacement parts shall be warranted for the remainder of the original period of notification set forth above, but in no event less than 12 months from repair or replacement. At its expense, Buyer shall remove and ship to Seller any such nonconforming items and shall reinstall the repaired or replaced parts. Buyer shall grant Seller access to the goods at all reasonable times in order for Seller to determine any nonconformity in the goods. Seller shall have the right of disposal of items replaced by it. If Seller is unable or unwilling to repair or replace, or if repair or replacement does not remedy the nonconformity, Seller and Buyer shall negotiate an equitable adjustment in the contract price, which may include a full refund of the contract price for the nonconforming goods.

(c) SELLER HEREBY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, EXCEPT THAT OF TITLE, SPECIFICALLY, IT DISCLAIMS THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, COURSE OF DEALING AND USAGE OF TRADE.

(d) Buyer and successors of Buyer are limited to the remedies specified in this article and shall have no others for a nonconformity in the goods. Buyer agrees that these remedies provide Buyer and its successors with a minimum adequate remedy and are their exclusive remedies, whether Buyer's or its successors' remedies are based on contract, warranty, tort (including negligence), strict liability, indemnity, or any other legal theory, and whether arising out of warranties, representations, instructions, installations, or non-conformities from any cause.

(e) Note: This article 1 does not apply to any software which may be furnished by Seller. In such cases, the attached Software License Addendum applies.

2. PATENTS – Seller shall pay costs and damages finally awarded in any suit against Buyer or its vendees to the extent based upon a finding that the design or construction of the goods as furnished infringes a United States patent (except infringement occurring as a result of incorporating a design or modification at Buyer's request), provided that Buyer promptly notifies Seller of any charge of infringement, and Seller is given the right at its expense to settle such charge and to defend or control the defense of any suit based upon such charge. Seller shall have no obligation hereunder with respect to claims, suits or proceedings, resulting from or related to, in whole or in part, (i) the use of software or software documentation, (ii) compliance with Buyer's specifications, (iii) the combination with, or modification of, the goods after delivery by Seller, or (iv) the use of the goods, or any part thereof, in the practice of a process. THIS ARTICLE SETS FORTH SELLER'S ENTIRE LIABILITY WITH RESPECT TO PATENTS.

3. PERFORMANCE; DELAYS – Timely performance by Seller is contingent upon Buyer's supplying to Seller, when needed, all required technical information and data, including drawing approvals, and all required commercial documentation. If Seller suffers delay in performance due to any cause beyond its reasonable control, the time of performance shall be extended a period of time equal to the period of the delay and its consequences. Seller will give to Buyer notice within a reasonable time after Seller becomes aware of any such delay.

4. SHIPMENT, TITLE AND RISK OF LOSS – Unless the delivery terms of this contract expressly provide for F O B destination, shipping/delivery will be F O B Seller's point of shipment with title to the goods and risk of loss or damage passing to Buyer at that point. Buyer will be responsible for shipment during transit and for filing any damage or loss claims directly with the carrier. Seller may make partial shipments.

5. TAXES – Any applicable duties or sales, use, excise, value-added or similar taxes will be added to the price and invoiced separately (unless an acceptable exemption certificate is furnished).

6. TERMS OF PAYMENT – (a) Unless otherwise stated, all payments shall be in United States dollars, and a pro rata payment shall become due as each shipment is made. If shipment is delayed by Buyer, date of notice of readiness for shipment shall be deemed to be date of shipment for payment purposes.

(b) On late payments, the contract price shall, without prejudice to Seller's right to immediate payment, be increased by 1 ½% per month on the unpaid balance, but not to exceed the maximum permitted by law.

(c) If any time in Seller's judgment Buyer is unable or unwilling to meet the terms specified, Seller may require satisfactory assurance or full or partial payment as a condition to commencing or continuing manufacture or making shipment, and may, if shipment has been made, recover the goods from the carrier, pending receipt of such assurances.

7. NONCANCELLATION – Buyer may not cancel or terminate for convenience, or direct suspension of manufacture, except with Seller's written consent and then only upon terms that will compensate Seller for its engineering, fabrication and purchasing charges and any other costs relating to such cancellation, termination or suspension, plus a reasonable amount for profit.

8. NUCLEAR – Buyer represents and warrants that the goods covered by this contract shall not be used in or in connection with a nuclear facility or application. If Buyer is unable to make such representation and warranty, then Buyer agrees to indemnify and hold harmless Seller and to waive and require its insurers to waive all right of recovery against Seller for any damage, loss, destruction, injury or death resulting from a "nuclear incident", as that term is defined in the Atomic Energy Act of 1954, as amended, whether or not due to Seller's negligence.

9. LIMITATION OF LIABILITY – Neither Seller, nor its suppliers shall be liable, whether in contract, warranty, failure of a remedy to achieve its intended or essential purposes, tort (including negligence), strict liability, indemnity or any other legal theory, for loss of use, revenue or profit, or for costs of capital or of substitute use or performance, or for indirect, special, liquidated, incidental or consequential damages, or for any other loss or cost of a similar type, or for claims by Buyer for damages of Buyer's customers. Seller's maximum liability under this contract shall be the contract price. Buyer and Seller agree that the exclusions and limitations set forth in this article are separate and independent from any remedies which Buyer may have hereunder and shall be given full force and effect whether or not any or all such remedies shall be deemed to have failed of their essential purpose.

10. GOVERNING LAW AND ASSIGNMENT - The laws of the State of Georgia shall govern the validity, interpretation and enforcement of this contract, without regard to its conflicts of law principles. The application of the United Nations Convention on Contracts for the International Sale of Goods shall be excluded. Assignment may be made only with written consent of both parties, provided, however, Seller may assign to its affiliate without Buyer's consent.

11. ATTORNEY FEES - Buyer shall be liable to Seller for any attorney fees and costs incurred by Seller in enforcing any of its rights hereunder.

12. DISPUTES - Either party may give the other party written notice of any dispute arising out of or relating to this contract and not resolved in the normal course of business. The parties shall attempt in good faith to resolve such dispute promptly by negotiations between executives who have authority to settle the dispute. If the matter has not been resolved within 60 days of the notice, either party may initiate non-binding mediation of the dispute.

13. STATUTE OF LIMITATIONS - To the extent permitted by applicable law, any lawsuit for breach of contract, including breach of warranty, arising out of the transactions covered by this contract, must be commenced not later than twelve (12) months from the date the cause of action accrued.

14. PRICES - In the event of a price increase or decrease, the price of goods on order will be adjusted to reflect such increase or decrease. This does not apply to a shipment held by request of Buyer. Goods already shipped are not subject to price increase or decrease. Orders on a bid or contract basis are not subject to this article. Seller's prices include the costs of standard domestic packing only. Any deviation from this standard packing (domestic or export), including U.S. Government sealed packing, will result in extra charges. To determine such extra charges, consult Seller's sales offices. Order of less than \$400 will be charged a \$25 handling fee.

15. ADDITIONAL TERMS OF PAYMENT - (a) Invoice payment terms are as shown on latest discount sheets as issued from time to time. Cash discounts are not applicable to notes or trade acceptances, to prepaid transportation charges when added to Seller's invoices or to discountable items if there are undisputed past due items on the account. Portions of an invoice in dispute should be deducted and the balance remitted with a detailed explanation of the deduction. Cash discounts will only be allowed on that portion of the invoice paid within the normal discount period.

(b) Freight will be allowed to any common-carrier free-delivery point within the United States, excluding Alaska and Hawaii, on shipments exceeding \$1,000 net or more providing Seller selects the carrier. On shipments to Alaska and Hawaii, freight will be allowed to dockside at the listed port of debarkation nearest the destination point on shipments of \$1,000 net or more. Buyer shall pay all special costs such as cartage, stevedoring and insurance. Special freight allowances are as shown on latest discount sheets as issued from time to time. Cataloged weights are estimated, not guaranteed. Seller assumes no responsibility for tariff classifications on carriers.

16. CHANGES IN LAWS AND REGULATIONS – Seller's prices and timely performance are based on all applicable laws, rules, regulations, orders, codes, standards or requirements of governmental authorities effective on the date of Seller's proposal. Any change to any law, rule, regulation, order, code, standard or requirement which requires any change hereunder shall entitle Seller to an equitable adjustment in the prices and any time of performance.

PURCHASER'S ACCEPTANCE

The foregoing is hereby accepted.

(Name of Purchaser)

By _____

Title

Date

Siemens Energy & Automation, Inc.

By _____

Bill of Materials

Switchboard

Project Name: IPP
Quotation Name: IPP Cooling Tower MCC
Customer Name: ENERGY MANAGEMENT CORP
Project Number: 1149-1698K
Quotation #: 1149-1698K-10
Customer Acct#: 359580AB

Sales Order

Designation(s): Switchboard A
Item Class: 0696 - SWBD SB3 FCS2 CB40LM
Standard Lead Time: 40 Days

Specifications

Configuration:	Single Main & Branches	Certification:	UL
System Voltage:	480Y/277 3ø4W Wye AC	Enclosure:	NEMA2/1A
Interrupt Rating:	65,000 AIC	Switchbrd Height:	90
Bus Bracing:	65,000 AIC	Service Entrance:	Yes
Bus Material:	65°C Copper	Series Ratings:	No
Main Amps:	3200	Incoming Type:	BUSWAY
		Incoming Position:	TOP LEFT

Qty	Sub Qty	Description
Main Device		
1		Insulated Case CB
	1	3200/3 M.O. D.O. SBS - 3200, 3200A Sensors, 3200A Plug, Main Breaker
	1	Trip Unit - LSIGT
	1	Siemens Digital Meter 9300DC - 100 - ZZZZA
	1	Current Transformer - 3200
	1	Meter w/ integrated display
	1	85-240VAC/110-300VDC
	1	50 - 347V L-N
	1	STD - SEAbus/ION, Modbus Communication Protocol
	1	Special Communication: STD - RS485
	1	Potential Transformer
	1	Shunt Trip w/ Control Voltage 120
	1	Pilotlight - Oiltight
	1	Key Interlock
Branch Devices		
2		Insulated Case CB
	1	2000/3 M.O. D.O. SBS - 2000, 2000A Sensors, 2000A Plug, Branch Breaker
	1	(7) #3/0-500 kcmil
	1	Trip Unit - LSIT
	1	Auxiliary Contact - 1A-1B
	1	Key Interlock
Incoming Modifications		
1		Incoming 3200A Busway

Structural Options

Qty	Sub Qty	Description
2		Lifting Eyes

Modifications and Accessories

Qty	Sub Qty	Description
1		Tapered 1000A/in2 Cu Bus 100% Rated
2		Base Unit Cost
1		Tapered Cu Bus

Bill of Materials

Switchboard

1	Front and Rear Alignment
2	Indoor Drip Proof w/Gaskets
1	Factory Modifications - Transition Section

Comments:

Notes:

Bill of Materials

Switchboard

Project Name: IPP
Quotation Name: IPP Cooling Tower MCC
Customer Name: ENERGY MANAGEMENT CORP

Project Number: 1149-1698K
Quotation #: 1149-1698K-10
Customer Acct#: 359580AB

Sales Order

Designation(s): Switchboard B
Item Class: 0696 - SWBD SB3 FCS2 CB40LM
Standard Lead Time: 40 Days

Specifications

Configuration: Single Main & Branches
System Voltage: 480Y/277 3Ø4W Wye AC
Interrupt Rating: 65,000 AIC
Bus Bracing: 65,000 AIC
Bus Material: 65°C Copper
Main Amps: 3200

Certification: UL
Enclosure: NEMA2/1A
Switchbrd Height: 90
Service Entrance: Yes
Series Ratings: No
Incoming Type: BUSWAY
Incoming Position: TOP LEFT

Qty	Sub Qty	Description
Main Device		
1		Insulated Case CB
	1	3200/3 M.O. D.O. SBS - 3200, 3200A Sensors, 3200A Plug, Main Breaker
	1	Trip Unit - LSIGT
	1	Siemens Digital Meter 9300DC - 100 - ZZZZA
	1	Current Transformer - 3200
	1	Meter w/ integrated display
	1	85-240VAC/110-300VDC
	1	50 - 347V L-N
	1	STD - SEAbus/ION, Modbus Communication Protocol
	1	Special Communication: STD - RS485
	1	Potential Transformer
	1	Pilotlight - Oiltight
	1	Shunt Trip w/ Control Voltage 120
	1	Auxiliary Contact - 1A-1B
	1	Mechanical Interlock
	1	Key Interlock
Branch Devices		
1		Insulated Case CB
	1	2000/3 M.O. D.O. SBS - 2000, 2000A Sensors, 2000A Plug, Branch Breaker
	1	(7) #3/0-500 kcmil
	1	Trip Unit - LSIT
	1	Key Interlock
Incoming Modifications		
1		Incoming 3200A Busway

Structural Options

Qty	Sub Qty	Description
2		Lifting Eyes

Modifications and Accessories

Qty	Sub Qty	Description
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Bill of Materials

Switchboard

1	Tapered 1000A/in2 Cu Bus 100% Rated
2	Base Unit Cost
1	Tapered Cu Bus
1	Front and Rear Alignment
2	Indoor Drip Proof w/Gaskets
Factory Modifications	
1	- Transition Section

Comments:

Notes:

Bill of Material

Motor Control Center

Project Name: IPP
Quotation Name: IPP Cooling Tower MCC
Customer Name: ENERGY MANAGEMENT CORP

Project Number: 1149-1698K
Quotation #: 1149-1698K-10
Customer Acct#: 359580AB

Sales Order #:

Designation(s): MCCA

Item Class: 0566 - MCC Complex CB
Catalog Number: 89BFCCB
Description: TIASTAR - 20" Deep, Front Only, Circuit Breaker, Complex (Lead Time 8-10 Weeks)

Specifications

System Voltage: 480 Volts 3Ø 3W 60Hz
Interrupt Rating: 65,000 AIC
Incoming: Main Lugs Only

Enclosure Type: NEMA2/12
Wiring Type: I
Wiring Class: B

Qty	Sub Qty	Description	Lead Time ¹
Incoming Termination			
1		Incoming	
	1	Main Lugs Only, 2000 Amps, Silver Plated Copper (Tin Plated Stabs), Top Mounted, 65K Bracing	E
Misc. Charges			
1		10 amp breaker for ground resistor panel	P
Enclosures			
3		Enclosure, 20" Deep, Front Only	
	1	20" Deep, Front Only, 20" Wide Enclosure	P
	1	NEMA Type 2, Indoor, Drip Proof	P
	1	NEMA Type 12, Industrial, Gasketed Doors & Cover Plates, Front Only	P
	1	Bus Bracing, 65,000 RMS Sym.	P
	1	Main Horizontal Bus, 2000 Amps, Silver Plated Copper (Tin Plated Stabs)	E
	1	Vertical Bus, 600 Amps, Silver Plated Copper (Tin Plated Stabs)	E
	1	Vertical Ground Bus, 300 Amps, Bare Copper	P
1		Enclosure, 20" Deep, Front Only	
	1	20" Deep, Front Only, 30" Wide Enclosure	P
	1	NEMA Type 2, Indoor, Drip Proof	P
	1	NEMA Type 12, Industrial, Gasketed Doors & Cover Plates, Front Only	P
	1	Bus Bracing, 65,000 RMS Sym.	P
	1	Main Horizontal Bus, 2000 Amps, Silver Plated Copper (Tin Plated Stabs)	E
1		30x24x20 Pull Box, NEMA2/12	P
	1	Enclosure, 20" Deep, Front Only	
	1	20" Deep, Front Only, 40" Wide Enclosure	P
	1	NEMA Type 2, Indoor, Drip Proof	P
	1	NEMA Type 12, Industrial, Gasketed Doors & Cover Plates, Front Only	P
	1	Bus Bracing, 65,000 RMS Sym.	P
	1	Main Horizontal Bus, 2000 Amps, Silver Plated Copper (Tin Plated Stabs)	E
Branch Devices			
5		Starter, FVNR	

¹ Lead Times (Estimated): P = 2 weeks, S = 4 weeks, E = 6 - 8 weeks and C = consult factory.
Lead times are based on work days.

Bill of Material

Motor Control Center

1	FVNR, CB, Size 5, 200 HP, Class I, Type B	P
1	Simocode Overload	C
1	Control Circuit Transformer, 480V, 150VA	P
1	Control Circuit Interlock on Handle 1 NO, 1 NC	P
1	Aux. Contact, N.C., Sz 5, Class I, Type B	P
2	Aux. Contact, N.O., Sz 5, Class I, Type B	P
4	Extra Control Terminal Points (May Require Extra Space, Contact Factory)	P
1	14 AWG Control Wire (SIS Insul.)	S
1	Vacuum Contactor, Size 5	C
1	Pilot light (R), Label: Running	P
1	LED Bulb for Pilot Light	S
1	Feeder, Circuit Breaker	
1	HFD6 Feeder TM CB, Standard, 3 Pole, 250A Frame @ 65KAIC, 250A Trip	E
1	Feeder, Circuit Breaker	
1	HHED6 Feeder TM CB, Dual, 3 Pole, 125A Frame @ 65KAIC, 125A Trip	P
1	Feeder, Circuit Breaker	
1	HHED6 Feeder TM CB, Dual, 3 Pole, 125A Frame @ 65KAIC, 60A Trip	P
1	Miscellaneous, Special Unit	
1	Grounding resistor panel, 40" wide, 72" high	E

Comments:

Notes:

Bill of Material

Motor Control Center

Project Name: IPP
Quotation Name: IPP Cooling Tower MCC
Customer Name: ENERGY MANAGEMENT CORP

Project Number: 1149-1698K
Quotation #: 1149-1698K-10
Customer Acct#: 359580AB

Sales Order #:

Designation(s): MCCB

Item Class: 0566 - MCC Complex CB
Catalog Number: 89BFCCB
Description: TIASTAR - 20" Deep, Front Only, Circuit Breaker, Complex (Lead Time 8-10 Weeks)

Specifications

System Voltage: 480 Volts 3ø 3W 60Hz
Interrupt Rating: 65,000 AIC
Incoming: Main Lugs Only

Enclosure Type: NEMA2/12
Wiring Type: I
Wiring Class: B

Qty	Sub Qty	Description	Lead Time ²
Incoming Termination			
1		Incoming	
	1	Main Lugs Only, 2000 Amps, Silver Plated Copper (Tin Plated Stabs), Top Mounted, 65K Bracing	E
Misc. Charges			
1		10 amp breaker for ground resistor panel	P
Enclosures			
3		Enclosure, 20" Deep, Front Only	
	1	20" Deep, Front Only, 20" Wide Enclosure	P
	1	NEMA Type 2, Indoor, Drip Proof	P
	1	NEMA Type 12, Industrial, Gasketed Doors & Cover Plates, Front Only	P
	1	Bus Bracing, 65,000 RMS Sym.	P
	1	Main Horizontal Bus, 2000 Amps, Silver Plated Copper (Tin Plated Stabs)	E
	1	Vertical Bus, 600 Amps, Silver Plated Copper (Tin Plated Stabs)	E
	1	Vertical Ground Bus, 300 Amps, Bare Copper	P
1		Enclosure, 20" Deep, Front Only	
	1	20" Deep, Front Only, 30" Wide Enclosure	P
	1	NEMA Type 2, Indoor, Drip Proof	P
	1	NEMA Type 12, Industrial, Gasketed Doors & Cover Plates, Front Only	P
	1	Bus Bracing, 65,000 RMS Sym.	P
	1	Main Horizontal Bus, 2000 Amps, Silver Plated Copper (Tin Plated Stabs)	E
	1	30x24x20 Pull Box, NEMA2/12	P
1		Enclosure, 20" Deep, Front Only	
	1	20" Deep, Front Only, 40" Wide Enclosure	P
	1	NEMA Type 2, Indoor, Drip Proof	P
	1	NEMA Type 12, Industrial, Gasketed Doors & Cover Plates, Front Only	P
	1	Bus Bracing, 65,000 RMS Sym.	P
	1	Main Horizontal Bus, 2000 Amps, Silver Plated Copper (Tin Plated Stabs)	E
Branch Devices			
5		Starter, FVNR	

² Lead Times (Estimated): P = 2 weeks, S = 4 weeks, E = 6 - 8 weeks and C = consult factory.
Lead times are based on work days.

Bill of Material

Motor Control Center

1	FVNR, CB, Size 5, 200 HP, Class I, Type B	P
1	Simocode Overload	C
1	Control Circuit Transformer, 480V, 150VA	P
1	Control Circuit Interlock on Handle 1 NO, 1 NC	P
1	Aux. Contact, N.C., Sz 5, Class I, Type B	P
2	Aux. Contact, N.O., Sz 5, Class I, Type B	P
2	Extra Control Terminal Points (May Require Extra Space, Contact Factory)	P
1	14 AWG Control Wire (SIS Insul.)	S
1	Vacuum Contactor, Size 5	C
1	Adhesive Type Labels on Control Circuit Wires	C
1	Pilot light (R), Label: Running	P
1	LED Bulb for Pilot Light	S
1	Feeder, Circuit Breaker	
1	HFD6 Feeder TM CB, Standard, 3 Pole, 250A Frame @ 65KAIC, 250A Trip	E
1	Feeder, Circuit Breaker	
1	HHED6 Feeder TM CB, Dual, 3 Pole, 125A Frame @ 65KAIC, 60A Trip	P
1	Feeder, Circuit Breaker	
1	HHED6 Feeder TM CB, Dual, 3 Pole, 125A Frame @ 65KAIC, 70A Trip	P
1	Miscellaneous, Special Unit	
1	Neutral Grounding Resistor Panel Section, 40" wide, 72" high	E

Comments:

Notes:

Bill of Material**Motor Control Center**

Project Name: IPP
Quotation Name: IPP Cooling Tower MCC
Customer Name: ENERGY MANAGEMENT CORP

Project Number: 1149-1698K
Quotation #: 1149-1698K-10
Customer Acct#: 359580AB

Sales Order #:

Designation(s): MCCA Option

Item Class: 0566 - MCC Complex CB
Catalog Number: 89BFCCB
Description: TIASTAR - 20" Deep, Front Only, Circuit Breaker, Complex (Lead Time 8-10 Weeks)

Specifications

System Voltage: 480 Volts 3Ø 3W 60Hz
Interrupt Rating: 65,000 AIC
Incoming: Main Circuit Breaker

Enclosure Type: NEMA2/12
Wiring Type: I
Wiring Class: B

Qty	Sub Qty	Description	Lead Time ³
Incoming Termination			
1		Incoming	
	1	SBS4000 Main TM CB, Standard, 3 Pole, 4000A Frame @ 100KAIC, 2000A Trip	C
	1	Circuit Breaker Alarm, Class I, Type B	C
	1	Kirk Key for the Main Disconnect	C
	1	Shunt trip	C
Misc. Charges			
1		1600 amp	P
1		resistor breaker	P
1		Factory Option	P
Enclosures			
3		Enclosure, 20" Deep, Front Only	
	1	20" Deep, Front Only, 20" Wide Enclosure	P
	1	NEMA Type 2, Indoor, Drip Proof	P
	1	NEMA Type 12, Industrial, Gasketed Doors & Cover Plates, Front Only	P
	1	Bus Bracing, 65,000 RMS Sym.	P
	1	Main Horizontal Bus, 2000 Amps, Tin Plated Copper	E
	1	Vertical Bus, 600 Amps, Tin Plated Copper	P
	1	Horizontal Ground Bus, Bottom Mounted, 300 Amps, Silver Plated Copper	P
1		Enclosure, 20" Deep, Front Only	
	1	20" Deep, Front Only, 30" Wide Enclosure	P
	1	NEMA Type 2, Indoor, Drip Proof	P
	1	NEMA Type 12, Industrial, Gasketed Doors & Cover Plates, Front Only	P
	1	Bus Bracing, 65,000 RMS Sym.	P
	1	Main Horizontal Bus, 2000 Amps, Tin Plated Copper	E
	1	Horizontal Ground Bus, Bottom Mounted, 300 Amps, Silver Plated Copper	P
1		Enclosure, 20" Deep, Front Only	
	1	20" Deep, Front Only, 30" Wide Enclosure	P
	1	NEMA Type 2, Indoor, Drip Proof	P
	1	NEMA Type 12, Industrial, Gasketed Doors & Cover Plates, Front Only	P
	1	Bus Bracing, 65,000 RMS Sym.	P

³ Lead Times (Estimated): P = 2 weeks, S = 4 weeks, E = 6 - 8 weeks and C = consult factory.
Lead times are based on work days.

Bill of Material**Motor Control Center**

	1	Main Horizontal Bus, 2000 Amps, Tin Plated Copper	E
	1	Horizontal Ground Bus, Bottom Mounted, 300 Amps, Silver Plated Copper	P
	1	30x24x20 Pull Box, NEMA2/12	P
1		Enclosure, 20" Deep, Front Only	
	1	20" Deep, Front Only, 40" Wide Enclosure	P
	1	NEMA Type 2, Indoor, Drip Proof	P
	1	NEMA Type 12, Industrial, Gasketed Doors & Cover Plates, Front Only	P
	1	Bus Bracing, 65,000 RMS Sym.	P
	1	Main Horizontal Bus, 2000 Amps, Tin Plated Copper	E
	1	Horizontal Ground Bus, Bottom Mounted, 300 Amps, Silver Plated Copper	P
		Branch Devices	
5		Starter, FVNR	
	1	FVNR, CB, Size 5, 200 HP, Class I, Type B	P
	1	Bimetal Amb. Comp. Overload XClass 20	P
	1	Overload Heaters Included	P
	1	Control Circuit Transformer, 480V, 50VA	P
	1	Aux. Contact, N.C., Sz 5, Class I, Type B	P
	2	Aux. Contact, N.O., Sz 5, Class I, Type B	P
	1	Vacuum Contactor, Size 5	C
1		Feeder, Circuit Breaker	
	1	HFD6 Feeder TM CB, Standard, 3 Pole, 250A Frame @ 65KAIC, 250A Trip	E
1		Feeder, Circuit Breaker	
	1	HHED6 Feeder TM CB, Dual, 3 Pole, 125A Frame @ 65KAIC, 100A Trip	P
1		Feeder, Circuit Breaker	
	1	HHED6 Feeder TM CB, Dual, 3 Pole, 125A Frame @ 65KAIC, 60A Trip	P
1		Miscellaneous, Blank Space	
	1	Blank Section, 30" wide, 72" high	P
1		Miscellaneous, Mounting Panel	
	1	Mounting Panel, 40" wide, 72" high	P

Comments:**Notes:**

Bill of Material**Motor Control Center**

Project Name: IPP
Quotation Name: IPP Cooling Tower MCC
Customer Name: ENERGY MANAGEMENT
 CORP

Project Number: 1149-1698K
Quotation #: 1149-1698K-10
Customer Acct#: 359580AB

Sales Order #:

Designation(s): MCCB Option

Item Class: 0566 - MCC Complex CB
Catalog Number: 89BFCCB
Description: TIASTAR - 20" Deep, Front Only, Circuit Breaker, Complex (Lead Time 8-10 Weeks)

Specifications

System Voltage: 480 Volts 3Ø 3W 60Hz
Interrupt Rating: 65,000 AIC
Incoming: Main Circuit Breaker

Enclosure Type: NEMA2/12
Wiring Type: I
Wiring Class: B

Qty	Sub Qty	Description	Lead Time ⁴
		Incoming Termination	
1		Incoming	
	1	SBS4000 Main TM CB, Standard, 3 Pole, 4000A Frame @ 100KAIC, 2000A Trip	C
	1	Circuit Breaker Alarm, Class I, Type B	C
	1	Kirk Key for the Main Disconnect	C
	1	Shunt trip	C
		Misc. Charges	
1			P
1		resistor disconnect	P
1		Factory Option	P
		Enclosures	
3		Enclosure, 20" Deep, Front Only	
	1	20" Deep, Front Only, 20" Wide Enclosure	P
	1	NEMA Type 2, Indoor, Drip Proof	P
	1	NEMA Type 12, Industrial, Gasketed Doors & Cover Plates, Front Only	P
	1	Bus Bracing, 65,000 RMS Sym.	P
	1	Main Horizontal Bus, 2000 Amps, Tin Plated Copper	E
	1	Vertical Bus, 600 Amps, Tin Plated Copper	P
	1	Horizontal Ground Bus, Bottom Mounted, 300 Amps, Silver Plated Copper	P
1		Enclosure, 20" Deep, Front Only	
	1	20" Deep, Front Only, 30" Wide Enclosure	P
	1	NEMA Type 2, Indoor, Drip Proof	P
	1	NEMA Type 12, Industrial, Gasketed Doors & Cover Plates, Front Only	P
	1	Bus Bracing, 65,000 RMS Sym.	P
	1	Main Horizontal Bus, 2000 Amps, Tin Plated Copper	E
	1	Horizontal Ground Bus, Bottom Mounted, 300 Amps, Silver Plated Copper	P
	1	30x24x20 Pull Box, NEMA2/12	P
1		Enclosure, 20" Deep, Front Only	
	1	20" Deep, Front Only, 40" Wide Enclosure	P
	1	NEMA Type 2, Indoor, Drip Proof	P
	1	NEMA Type 12, Industrial, Gasketed Doors & Cover Plates, Front Only	P

⁴ Lead Times (Estimated): P = 2 weeks, S = 4 weeks, E = 6 - 8 weeks and C = consult factory.
 Lead times are based on work days.

Bill of Material**Motor Control Center**

1	Bus Bracing, 65,000 RMS Sym.	P
1	Main Horizontal Bus, 2000 Amps, Tin Plated Copper	E
1	Horizontal Ground Bus, Bottom Mounted, 300 Amps, Silver Plated Copper	P
Branch Devices		
5	Starter, FVNR	
1	FVNR, CB, Size 5, 200 HP, Class I, Type B	P
1	Bimetal Amb. Comp. Overload XClass 20	P
1	Overload Heaters Included	P
1	Control Circuit Transformer, 480V, 50VA	P
1	Aux. Contact, N.C., Sz 5, Class I, Type B	P
2	Aux. Contact, N.O., Sz 5, Class I, Type B	P
1	Vacuum Contactor, Size 5	C
1	Feeder, Circuit Breaker	
1	HFD6 Feeder TM CB, Standard, 3 Pole, 250A Frame @ 65KAIC, 250A Trip	E
1	Feeder, Circuit Breaker	
1	HHED6 Feeder TM CB, Dual, 3 Pole, 125A Frame @ 65KAIC, 100A Trip	P
1	Feeder, Circuit Breaker	
1	HHED6 Feeder TM CB, Dual, 3 Pole, 125A Frame @ 65KAIC, 60A Trip	P
1	Miscellaneous, Mounting Panel	
1	Mounting Panel, 40" wide, 72" high	P

Comments:**Notes:**

Bill of Material

Busway

Project Name: IPP
Quotation Name: IPP Cooling Tower MCC
Customer Name: ENERGY MANAGEMENT
CORP

Project Number: 1149-1698K
Quotation #: 1149-1698K-10
Customer Acct#: 359580AB

Sales Order #:
Designation(s): Bus MCC Transformer Bus

Busway Item 0882 -- Sentron Copper Feeder
Class:

Section 1 - 12 ft., 3000A, Sentron Copper Feeder, 480Y/277 3Ø4W, Integral Grd, 200K AIC, Amb 40
Specifications: C, Std Neut

Qty	Sub Qty	Description
1		Busway Run -- Section 1
		Busway
	12	Sentron Copper Feeder -- SX430C19F
		Accessories
	2	90 Elbow -- SX430C19EL
	1	Flange wall/floor/ceil -- SX430C19GWFL
	1	Xfmr Throat -- SX430C19VTTX
	3	Hanger - Trapeze -- SXTH3

Comments:

Notes:

Bill of Material

Busway

Project Name: IPP
Quotation Name: IPP Cooling Tower MCC
Customer Name: ENERGY MANAGEMENT CORP
Project Number: 1149-1698K
Quotation #: 1149-1698K-10
Customer Acct#: 359580AB

Sales Order #:
Designation(s): Switchboard Bus Switchboard Bus(2)

Busway Item Class: 0882 -- Sentron Copper Feeder

Section 1 - Specifications: 9 ft., 3000A, Sentron Copper Feeder, 480Y/277 3Ø4W, Integral Grd, 200K AIC, Amb 40 C, Std Neut

Qty	Sub Qty	Description
1		Busway Run -- Section 1
		Busway
	9	Sentron Copper Feeder -- SX430C10F
		Accessories
	2	90 Elbow -- SX430C10EL
	1	Switchboard Stub Siemens -- SX430C10FEND
	3	Hanger - Trapeze -- SXT3H3
	1	Flange wall/floor/ceil -- SX430C10GWFL

Comments:

Notes:

Bill of Material

Busway

Project Name: IPP
Quotation Name: IPP Cooling Tower MCC
Customer Name: ENERGY MANAGEMENT
CORP

Project Number: 1149-1698K
Quotation #: 1149-1698K-10
Customer Acct#: 359580AB

Sales Order #:
Designation(s): MCC Tie Bus

Busway Item 0882 -- Sentron Copper Feeder
Class:

Section 1 - 10 ft., 2000A, Sentron Copper Feeder, 480Y/277 3ø4W, Integral Grd, 150K AIC, Amb 40
Specifications: C, Std Neut

Qty	Sub Qty	Description
1		Busway Run -- Section 1
		Busway
	10	Sentron Copper Feeder -- SX320C10F
		Accessories
	2	Hanger - Trapeze -- SXTH2
	2	Switchboard Stub Siemens -- SX320C10FEND

Comments:

Notes:

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Motor Control Center

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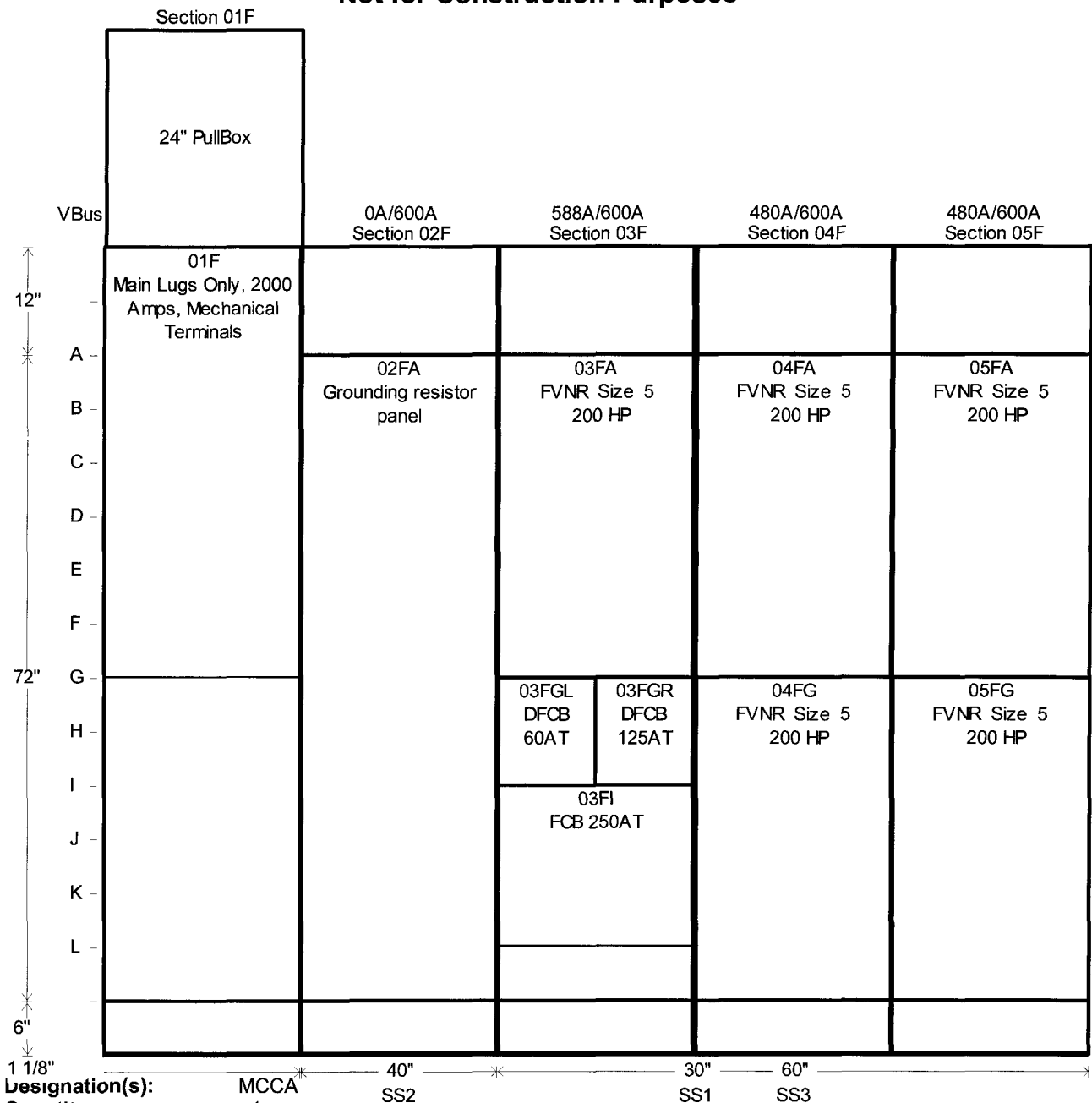
Designation(s): MCCA
Quantity: 1
Description: TIASTAR - 20" Deep, Front Only, Circuit Breaker, Complex (Lead Time 8-10 Weeks)
System Voltage: 480 Volts 3Ø 3W 60Hz
Interrupt Rating: 65,000 Amps Symmetrical
Incoming Power: Main Lugs Only
Total MCC Amps: 1578Amps

Project Name:	IPP	Quote #:	1149-1698K-10
Quote Name:	IPP Cooling Tower MCC	Customer #:	359580AB
Customer:	ENERGY MANAGEMENT CORP	P.O. #:	
Contractor:	NotApplicable	Sales Order #:	
Specifier:	NotApplicable	Date Created:	8/26/2002
Date Created:	8/26/2002	Date Revised:	8/26/2002
EPM Version:	1.0001	Drawing Type:	<input type="checkbox"/> Approval <input type="checkbox"/> Record

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Project Name:	IPP	Quote #:	1149-1698K-10
Quote Name:	IPP Cooling Tower MCC	Customer #:	359580AB
Customer:	ENERGY MANAGEMENT CORP	P.O. #:	
Contractor:	NotApplicable	Sales Order #:	
Specifier:	NotApplicable	Date Revised:	8/26/2002
Date Created:	8/26/2002	Drawing Type:	<input type="checkbox"/> Approval <input type="checkbox"/> Record
EPM Version:	1.0001		

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Sections 1 - 5 of 5 (Front View)

Designation(s): MCCA
Quantity: 1
Description: TIASTAR - 20" Deep, Front Only, Circuit Breaker, Complex (Lead Time 8-10 Weeks)
System Voltage: 480 Volts 3Ø 3W 60Hz
Interrupt Rating: 65,000 Amps Symmetrical
Incoming Power: Main Lugs Only
Total MCC Amps: 1578Amps

Project Name:	IPP	Quote #:	1149-1698K-10
Quote Name:	IPP Cooling Tower MCC	Customer #:	359580AB
Customer:	ENERGY MANAGEMENT CORP	P.O. #:	
Contractor:	NotApplicable	Sales Order #:	
Specifier:	NotApplicable	Date Revised:	8/26/2002
Date Created:	8/26/2002	Drawing Type:	<input type="checkbox"/> Approval <input type="checkbox"/> Record
EPM Version:	1.0001		

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Motor Control Center

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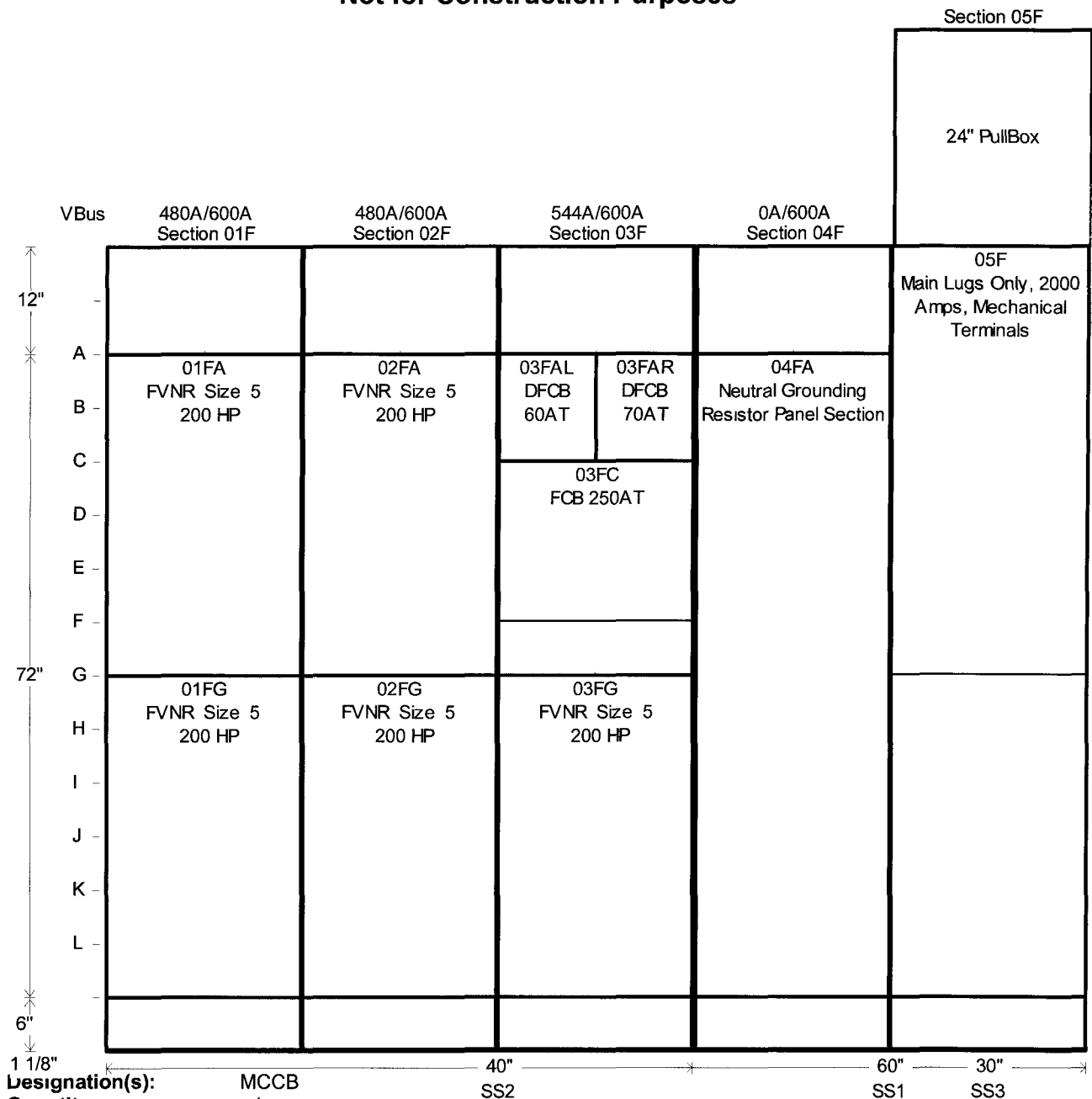
Designation(s): MCCB
Quantity: 1
Description: TIASTAR - 20" Deep, Front Only, Circuit Breaker, Complex (Lead Time 8-10 Weeks)
System Voltage: 480 Volts 3Ø 3W 60Hz
Interrupt Rating: 65,000 Amps Symmetrical
Incoming Power: Main Lugs Only
Total MCC Amps: 1534Amps

Project Name:	IPP	Quote #:	1149-1698K-10
Quote Name:	IPP Cooling Tower MCC	Customer #:	359580AB
Customer:	ENERGY MANAGEMENT CORP	P.O. #:	
Contractor:	NotApplicable	Sales Order #:	
Specifier:	NotApplicable	Date Revised:	8/26/2002
Date Created:	8/26/2002	Drawing Type:	<input type="checkbox"/> Approval <input type="checkbox"/> Record
EPM Version:	1.0001		

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Quantity: 1

Description: TIASTAR - 20" Deep, Front Only, Circuit Breaker, Complex (Lead Time 8-10 Weeks)

System Voltage: 480 Volts 3Ø 3W 60Hz

Interrupt Rating: 65,000 Amps Symmetrical

Incoming Power: Main Lugs Only

Total MCC Amps: 1534Amps

Project Name:	IPP	Quote #:	1149-1698K-10
Quote Name:	IPP Cooling Tower MCC	Customer #:	359580AB
Customer:	ENERGY MANAGEMENT CORP	P.O. #:	
Contractor:	NotApplicable	Sales Order #:	
Specifier:	NotApplicable	Date Revised:	8/26/2002
Date Created:	8/26/2002	Drawing Type:	<input type="checkbox"/> Approval <input type="checkbox"/> Record
EPM Version:	1.0001		

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Motor Control Center

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Sections 1 - 5 of 5 (Front View)

Designation(s): MCCB
Quantity: 1
Description: TIASTAR - 20" Deep, Front Only, Circuit Breaker, Complex (Lead Time 8-10 Weeks)
System Voltage: 480 Volts 3Ø 3W 60Hz
Interrupt Rating: 65,000 Amps Symmetrical
Incoming Power: Main Lugs Only
Total MCC Amps: 1534Amps

Project Name:	IPP	Quote #:	1149-1698K-10
Quote Name:	IPP Cooling Tower MCC	Customer #:	359580AB
Customer:	ENERGY MANAGEMENT CORP	P.O. #:	
Contractor:	NotApplicable	Sales Order #:	
Specifier:	NotApplicable	Date Revised:	8/26/2002
Date Created:	8/26/2002	Drawing Type:	<input type="checkbox"/> Approval <input type="checkbox"/> Record
EPM Version:	1.0001		

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Motor Control Center

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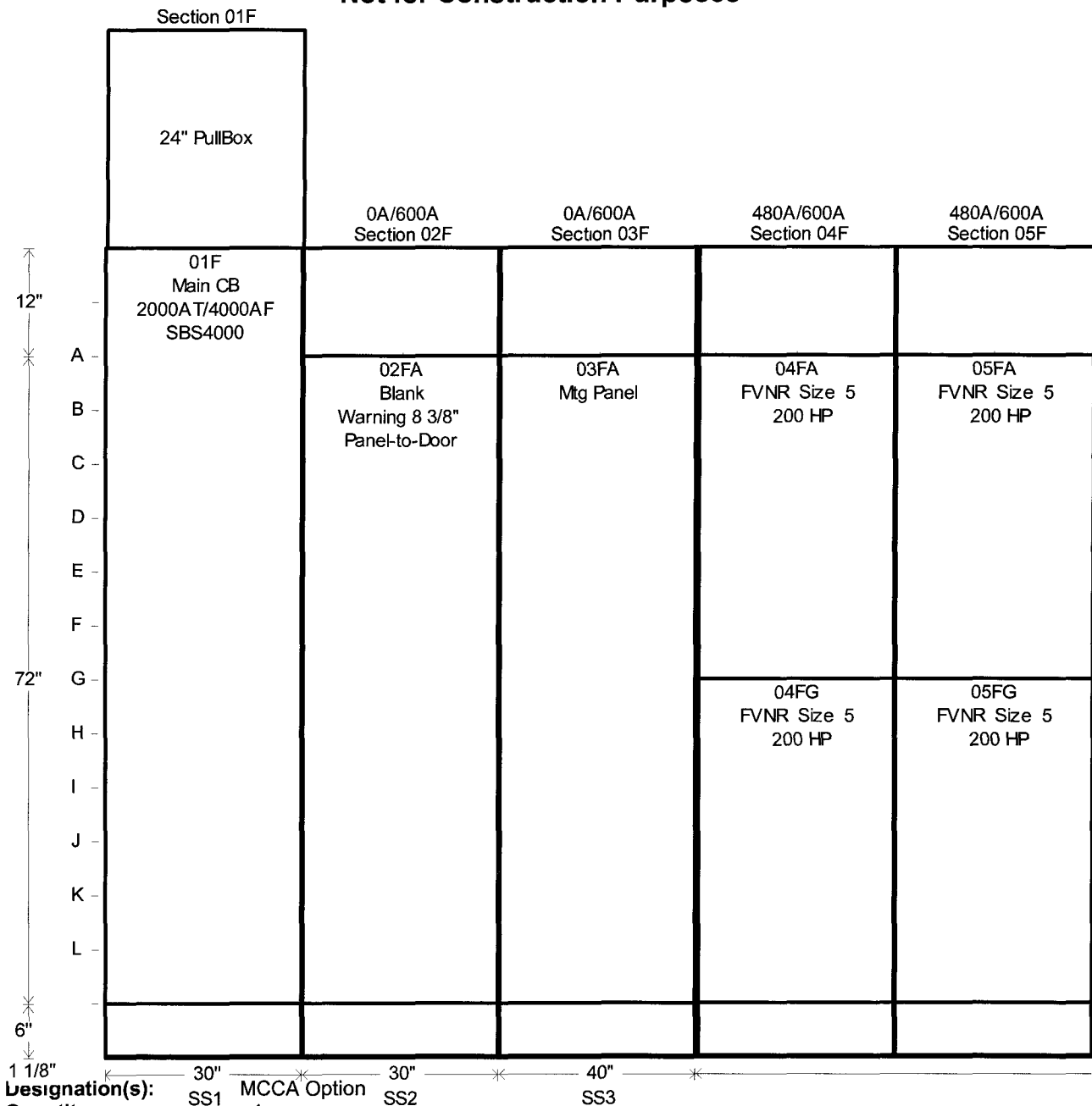
Designation(s): MCCA Option
Quantity: 1
Description: TIASTAR - 20" Deep, Front Only, Circuit Breaker, Complex (Lead Time 8-10 Weeks)
System Voltage: 480 Volts 3Ø 3W 60Hz
Interrupt Rating: 65,000 Amps Symmetrical
Incoming Power: Main Circuit Breaker
Total MCC Amps: 1528Amps

Project Name:	IPP	Quote #:	1149-1698K-10
Quote Name:	IPP Cooling Tower MCC	Customer #:	359580AB
Customer:	ENERGY MANAGEMENT CORP	P.O. #:	
Contractor:	NotApplicable	Sales Order #:	
Specifier:	NotApplicable	Date Created:	8/26/2002
Date Created:	8/26/2002	Date Revised:	8/26/2002
EPM Version:	1.0001	Drawing Type:	<input type="checkbox"/> Approval <input type="checkbox"/> Record

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Project Name:	IPP	Quote #:	1149-1698K-10
Quote Name:	IPP Cooling Tower MCC	Customer #:	359580AB
Customer:	ENERGY MANAGEMENT CORP	P.O. #:	
Contractor:	NotApplicable	Sales Order #:	
Specifier:	NotApplicable	Date Revised:	8/26/2002
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EPM Version:	1.0001		

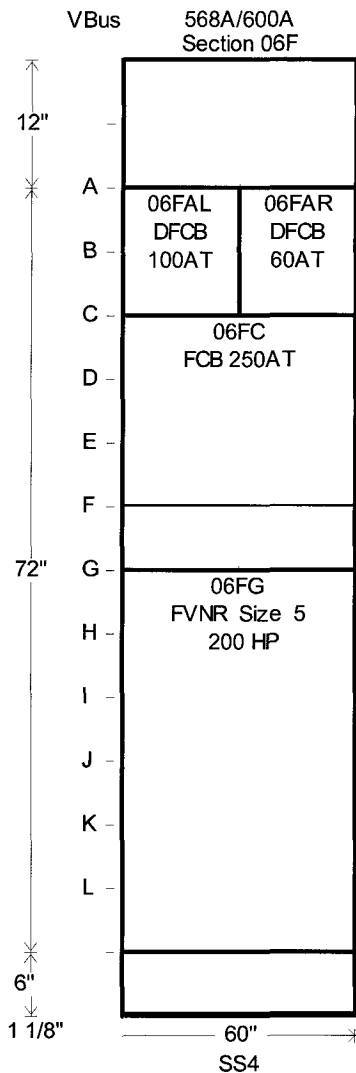
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Motor Control Center

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Sections 1 - 5 of 6 (Front View)



Sections 6 of 6 (Front View)

Designation(s): MCCA Option
Quantity: 1
Description: TIASTAR - 20" Deep, Front Only, Circuit Breaker, Complex (Lead Time 8-10 Weeks)
System Voltage: 480 Volts 3Ø 3W 60Hz
Interrupt Rating: 65,000 Amps Symmetrical
Incoming Power: Main Circuit Breaker
Total MCC Amps: 1528Amps

Project Name:	IPP	Quote #:	1149-1698K-10
Quote Name:	IPP Cooling Tower MCC	Customer #:	359580AB
Customer:	ENERGY MANAGEMENT CORP	P.O. #:	
Contractor:	NotApplicable	Sales Order #:	
Specifier:	NotApplicable	Date Created:	8/26/2002
Date Created:	8/26/2002	Date Revised:	8/26/2002
EPM Version:	1.0001	Drawing Type:	<input type="checkbox"/> Approval <input type="checkbox"/> Record

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Motor Control Center

Not for Construction Purposes

Designation(s): MCCB Option
Quantity: 1
Description: TIASTAR - 20" Deep, Front Only, Circuit Breaker, Complex (Lead Time 8-10 Weeks)
System Voltage: 480 Volts 3Ø 3W 60Hz
Interrupt Rating: 65,000 Amps Symmetrical
Incoming Power: Main Circuit Breaker
Total MCC Amps: 1528Amps

Project Name:	IPP	
Quote Name:	IPP Cooling Tower MCC	Quote #: 1149-1698K-10
Customer:	ENERGY MANAGEMENT CORP	Customer #: 359580AB
Contractor:	NotApplicable	P.O. #:
Specifier:	NotApplicable	Sales Order #:
Date Created:	8/26/2002	Date Revised: 8/26/2002
EPM Version:	1.0001	Drawing Type: <input type="checkbox"/> Approval <input type="checkbox"/> Record

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Motor Control Center

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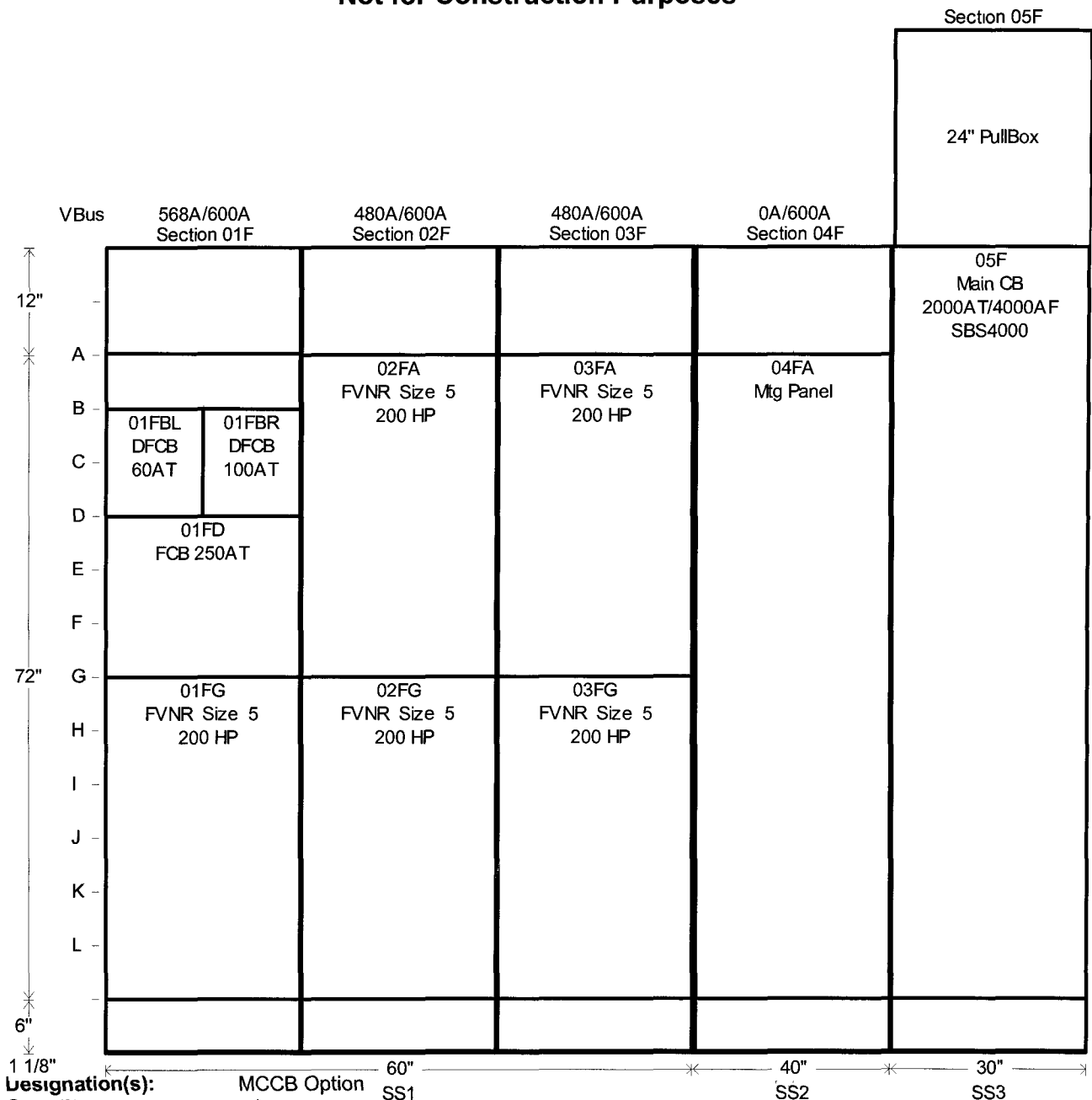
Designation(s): MCCB Option
Quantity: 1
Description: TIASTAR - 20" Deep, Front Only, Circuit Breaker, Complex (Lead Time 8-10 Weeks)
System Voltage: 480 Volts 3Ø 3W 60Hz
Interrupt Rating: 65,000 Amps Symmetrical
Incoming Power: Main Circuit Breaker
Total MCC Amps: 1528Amps

Project Name:	IPP	
Quote Name:	IPP Cooling Tower MCC	Quote #: 1149-1698K-10
Customer:	ENERGY MANAGEMENT CORP	Customer #: 359580AB
Contractor:	NotApplicable	P.O. #:
Specifier:	NotApplicable	Sales Order #:
Date Created:	8/26/2002	Date Revised: 8/26/2002
EPM Version:	1.0001	Drawing Type: <input type="checkbox"/> Approval <input type="checkbox"/> Record

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Motor Control Center

Not for Construction Purposes



Designation(s): MCCB Option 1
Quantity: 1
Description: TIASTAR - 20" Deep, Front Only, Circuit Breaker, Complex (Lead Time 8-10 Weeks)
System Voltage: 480 Volts 3Ø 3W 60Hz
Interrupt Rating: 65,000 Amps Symmetrical
Incoming Power: Main Circuit Breaker
Total MCC Amps: 1528Amps

Project Name:	IPP	
Quote Name:	IPP Cooling Tower MCC	Quote #: 1149-1698K-10
Customer:	ENERGY MANAGEMENT CORP	Customer #: 359580AB
Contractor:	NotApplicable	P.O. #:
Specifier:	NotApplicable	Sales Order #:
Date Created:	8/26/2002	Date Revised: 8/26/2002
EPM Version:	1.0001	Drawing Type: <input type="checkbox"/> Approval <input type="checkbox"/> Record

Confidential

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IP7_025876

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Motor Control Center

Not for Construction Purposes

Sections 1 - 5 of 5 (Front View)

Designation(s): MCCB Option
Quantity: 1
Description: TIASTAR - 20" Deep, Front Only, Circuit Breaker, Complex (Lead Time 8-10 Weeks)
System Voltage: 480 Volts 3Ø 3W 60Hz
Interrupt Rating: 65,000 Amps Symmetrical
Incoming Power: Main Circuit Breaker
Total MCC Amps: 1528Amps

Project Name:	IPP	
Quote Name:	IPP Cooling Tower MCC	Quote #: 1149-1698K-10
Customer:	ENERGY MANAGEMENT CORP	Customer #: 359580AB
Contractor:	NotApplicable	P.O. #:
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